

REMARKS

This Response is submitted in reply to the non-final Office Action dated March 9, 2006, issued in connection with the above-identified application. Claims 1, 4-9, 12-17, 20-25 and 28-36 are presently pending in the application. With this Response, no claims have been amended and no new matter has been introduced. Favorable reconsideration is respectfully requested.

I. Status Of Claims

Claims 1, 4-5, 8-9, 12-13, 16-17, 20-21, 24 and 33-35 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Bradshaw et al. (U.S. Patent No. 6,674,731, hereafter "Bradshaw") in view of Cheng et al. (U.S. Patent No. 6,674,731, hereafter "Cheng"). Claims 6, 14 and 22 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Bradshaw in view of Cheng and further in view of Birdwell (U.S. Application No. 2001/0024435, hereafter "Birdwell"). Claims 25, 28, 29 and 32 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Bradshaw in view Cheng and further in view of Dillon (U.S. Patent No. 6,338,131, hereafter "Dillion"). Claim 30 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Bradshaw, Cheng, Dillion and further in view of Birdwell. Finally, claim 31 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Bradshaw, Cheng and Dillion and further in view of Jorgenson et al. (U.S. Patent No. 6,680,922, hereafter "Jorgenson").

II. Response To Claim Rejections

The Applicants respectfully traverse the above rejections for the following reasons. The present invention, as recited in independent claims 1, 9, 17 and 25, is directed to a system, method and computer-readable medium implemented for two-way satellite communications that include, in pertinent part, a terminal interface and receiver unit. More specifically, the terminal interface is implemented for the exchange of data between the receiver unit and a transmitter unit in the terminal. Additionally, the receiver unit is configured to translate data received from a host to a data format that conforms to a predetermined protocol supported by a hub. Therefore, the receiver unit provides data to the transmitter unit already in a format suitable for transmission to the hub. These features of the present invention are clearly supported by the Applicants' disclosure in ¶45-¶47 as well as in Figs. 1, 3 and 5a.

In the Office Action, the Examiner relies primarily on Bradshaw for teaching or suggesting the terminal interface and receiver unit recited in independent claim 1, 9, 17 and 25. Specifically, the Examiner points to col. 3, lines 47-49; col. 4, lines 14-15 (i.e., Fig. 10); and col. 12, lines 38-40 (i.e., Fig. 8) of Bradshaw for rendering obvious the terminal interface and receiver unit of the present invention.

The terminal interface and receiver unit of claim 1 (similarly recited in claims 9, 17 and 25) are specifically recited as follows:

*"...a terminal having a receiver unit and a transmitter unit, ..., comprising:
a terminal interface configured to permit exchange of data between the receiver unit and the transmitter unit, wherein the receiver unit is configured to translate data received from a host to a data frame that conforms to a predetermined protocol format that is supported by the hub;..."*

The Applicants maintain that at least two of the claim features noted above do not appear to be taught or suggested by Bradshaw: 1) an interface that permits data exchange between a receiving unit and a transmitting unit in a single terminal; and 2) a receiving unit that translates data received from a host to a data frame that is supported by a hub.

With regard to col. 3, lines 47-49 of Bradshaw, the references teaches or suggests a hub station that transmits content server data over a satellite link to remote units. The hub formats or converts the content server data to a format compatible with a DVB standard prior to transmission. This section of Bradshaw, therefore, appears to teach or suggest only the protocol supported by the hub (i.e., DVB). There is nothing in col. 3, lines 47-49 that teaches or suggests detailed features of the remote units, let alone an interface between subcomponents (e.g., receiver unit and transmitter unit) of the remote units.

With regard to col. 4, lines 14-15 of Bradshaw, the reference teaches or suggests a block diagram (i.e., Fig. 10) that illustrates the receiving system of a remote unit. In Fig. 10, the receiver system includes a standard DVB receiver and a converter. The DVB receiver receives a content data signal from, for example, the hub; and the converter receives the DVB data signal and converts it to a MAC data format, which can then be communicated to a LAN via a LAN

interface. Thus, this section of Bradshaw appears to teach or suggest the conversion of data from a protocol supported by the hub (i.e., DVB) to a data format supported by the LAN (i.e., MAC). Not only is this conversion process different from what is being claimed, it is actually the opposite of what is being claimed. In the present invention, the receiver unit translates data from a host (e.g., a PC) to a format supported by the hub. In Bradshaw, data is converted from a data format supported by the hub to another data format (e.g., LAN format). Thus, the receiving system in Bradshaw is implemented only for processing data received from the hub, not for transmission to the hub (i.e., from DVB to MAC, not from MAC to DVB). Accordingly, nothing in Fig. 10 illustrate the claimed conversion, let alone the operation of an interface between a receiving system a and a transmitting system in the remote unit.

With regard to col. 12, lines 38-40 of Bradshaw, the reference teaches or suggests a block diagram (i.e., Fig. 8) of a hub station transmitter. In Fig. 8, the transmitter includes, in pertinent part, an internet interface and a converter. The internet interface is implemented for receiving data in a MAC format and the converter converts the MAC data to a DVB data signal suitable for transmission from the hub. Thus, this section of Bradshaw merely teaches or suggests the operation of the hub, not a terminal. To this end, it appears that the Examiner has erroneously interpreted the hub transmitter in Bradshaw as being similar in the operation to the claimed receiver unit. In the present invention, however, a single terminal (i.e., ground terminal) includes both a receiver unit and a transmitter unit. The receiver unit performs a translation of data into a format supported by the hub and exchanges the data with the transmitter unit. To the contrary, Bradshaw at col. 12, lines 38-40 fails to even teach or suggest a terminal, let alone an interface, a receiving unit and a transmitting unit in the terminal.

Cheng teaches or suggests a method and apparatus that separates network-dependent from network-independent functions in set-top boxes (STBs), including digital consumer appliances and PCs. Although the apparatus in Cheng appears to be capable of receiving satellite inputs, there is nothing in the reference that teaches or suggests all the features of the receiver unit and the terminal interface of the present invention.

Moreover, Birdwell, Dillion and Jorgenson do not appear to overcome the deficiencies noted above in Bradshaw and Cheng. Accordingly, even if one of ordinary skill in the art were to combine the teachings of Bradshaw, Cheng, Birdwell, Dillion and Jorgenson, the combination

still would not teach or suggest all the features recited in independent claims 1, 9, 17 and 25. In particular, a terminal interface that is configured for data communication between a receiver unit and transmitter unit in a terminal, wherein the receiver unit is configured to translate data received from a host to a data format that conforms to predetermined protocol supported by a hub, is not taught or suggested.

Accordingly, independent claims 1, 9, 17 and 25 are now believed to be distinguishable over the prior art of record. Likewise, dependent claims 4-8, 12-16, 20-24 and 28-36 are also believed to be distinguishable over the prior art of record based on their respective dependencies on independent claims 1, 9, 17 and 25.

III. Conclusion

In light of the above, the Applicants respectfully submit that claims 1, 4-9, 12-17, 20-25 and 28-36 of the present application are both novel and non-obvious over the art of record. Accordingly, Applicants respectfully request that the rejections under 35 U.S.C. §103 be withdrawn and a timely Notice of Allowance be issued in this case. If any fees are due in connection with this application as a whole, the Director is authorized to deduct such fees from deposit account no. 02-1818. If such a deduction is made, please indicate the attorney docket number PD-200323 (115426-531) on the account statement.

Respectfully submitted,

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